

APPENDIX A

FLOODPLAIN ANALYSIS AND DETERMINATION

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Floodplain Delineation for Saline Valley Radar and Repeater Sites

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Executive Summary

Edwards Air Force Base (EAFB) is preparing an environmental assessment of the effects of proposed radar and repeater sites in Saline Valley, California. Executive Order 11988, *Floodplains Management*, requires Federal agencies to provide leadership and take action to reduce the risk of flood loss; minimize the effects of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values of floodplains in acquiring, managing, and disposing of Federal lands. Delineation of floodplains, in accordance with FEMA guidelines and requirements, will assist the Air Force Flight Test Center (AFFTC) in developing project alternatives that avoid siting facilities in the 100-year floodplain.

Preliminary flood hazard identification and delineations were performed for the proposed five radar sites and three repeater sites located within Saline Valley. Of the proposed five beacon radar sites (Central Saline, Grey Eagle Mine, Keyes Canyon, Keyes Canyon North, and McElvoy Canyon), only the Keyes Canyon site was located within an 100-year floodplain. None of the three proposed microwave repeater sites (Galena Peak, Lead Canyon North, and Lead Canyon South) were located within an 100-year floodplain; however, both Lead Canyon sites were adjacent to channels that were delineated as 100-year floodplains.

Based upon the geomorphic information observed in the field and the hydrologic and hydraulic information determined in the calculations and modeling of flood hazards, the proposed sites are prioritized as suitable in the following order (most to least):

Beacon Radar Sites

McElvoy Canyon
Keyes Canyon North
Grey Eagle Mine
Central Saline
Keyes Canyon

Microwave Repeater Sites

Galena Peak
Lead Canyon North
Lead Canyon South

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